

LONG RANGE
CCD
**BARCODE
SCANNER**
**USER
MANUAL**
460873




MANHATTAN[™]

MAN-460873-UM-0110-01

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Introduction

1.1 General

SG300RFM has been factory configured with a set of default parameters. All factory default settings are shown with <> and bold in the following sections. You may make your own settings by following procedures in this manual. If you want to save the settings permanently, you should scan the Bar Code of “Save Parameters” in chapter 2, otherwise the settings will not be saved after the scanner power is off, and all settings will back to previous settings.

By scanning “Set all default” Bar Code, the settings will go back to the factory default settings.

1.2 EMI certificated



CE standards

The CE mark as shown here indicates this product had been tested in accordance with the procedures given in European Council Directive 89/336/EEC and confirmed to comply with the Europe an Standard EN55022:1994/ A1: 1995 Class B, EN 55024/1998.

1.3 Legislation and WEEE symbol



LEGISLATION AND WEEE SYMBOL

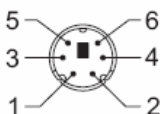
This marking shown on the product or its literature, indicates that it should not be disposed with other households wastes at the end of its working life. To prevent possible harm to the environment or human healthy from uncontrolled waste disposal , please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of when and how they can take this item fore environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase.

1.4 Pin Assignment

1.4.1 PC Keyboard Output

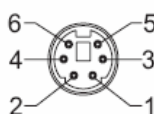
MiniDIN 6 MALE

Pin No.	Function
1	HOST DATA
3	GND
4	Vcc
5	HOST CLK



MiniDIN 6 FEMALE

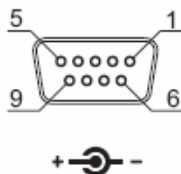
Pin No.	Function
1	KB DATA
3	GND
4	Vcc
5	KB CLK



1.4.2 RS-232 Output

RS-232 Output DB 9 Female

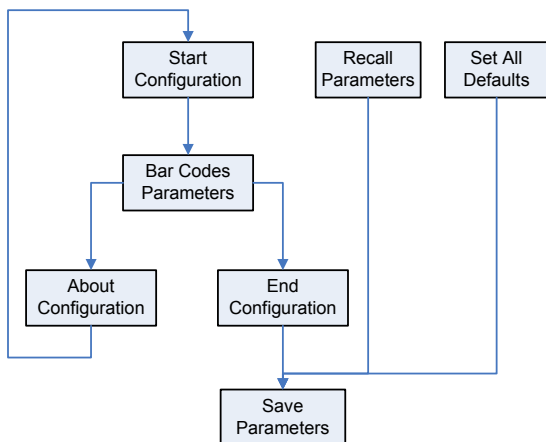
Pin No.	Function
2	TXD
3	RXD
5	GND
7	CTS
8	RTS
Power Lead	Vcc (+5V)






2

How to Configure

2.1 Flow Chart



2.2 General Process

Step1	Power on the scanner and cradle	
Step2	Scan Start of configuration	 $\%S+/3$
Step3	Scan the barcodes for the desired features before scan End.	
Step4	Scan End of configuration	 $\%S+/4$
Step5	Save The settings will be saved permanently.	 $\%S+/0$

2.3 Start Over

Abort configuration



%\$+/6

Scan Abort configuration when you want to terminate current programming status.

2.4 Recall

Replace the current parameters by the parameters saved last time.



%\$+/1

2.5 Set All Default

Set all the parameters to the factory default settings.



%\$+/2

2.6 Version Information

Display the decoder version information and date code.



%\$+/5

Operation



3.1 Beeper Option

<High>	 %01J3
Medium	 %01J2
Low	 %01J1
Off	 %01J0

3.2 Output Characters



This function is related to the software of the host.
The output results will be affected by the software.

None Data are displayed continuously	 %7S7+
<CR+LF> The cursor moves to the left once data are displayed, and it will move to the next line when the next data is ready to be displayed. (This function is related to the software of the host, and the results will be affected by the software)	 %7S2+

Enable CR Suffix – The scanner transmits a carriage return after each scan. The cursor moves to the left once data are displayed.



Enable LF Suffix – The scanner transmits a line feed after each scan. The cursor moves to the next line once data are displayed.



Enable Space

Once data are displayed, the cursor will skip a space to get ready for the next data.



Enable Tab(HT)

Once data are displayed, the cursor will skip a tab to get ready for the next data.



Enable ALT Method

Send Character by Alt method

Once this function is activated, no matter the keyboard is locked or unlocked, the output characters will not be affected by the keyboard settings.

This function is only applicable when the scanner is used with PC.



<Disable ALT Method>



Number as keypad data

Once this function is activated, the output of the scanning comes from the numerical pad's code.



%01K4

<number as normal data>



%01K0

Enable STX-ETX

Before displaying a data, this function will add a STX ASCII code in front of the data, and an ETX ASCII code at the end of the data. This function is only limited to RS232 interface.



%7S5+

3.3 Reverse Output Characters



Example: 012345→543210

Enable



%03H1

<Disable>



%03H0

3.4 Upper/Lower Case

<No Change>

The case of the output characters does not change.



%0330

Enable Lower Case Output characters in lower case.



%0332

The results will be affected by the keyboard settings. Thus,

please lock the keyboard
before testing the scanner.

Enable Upper Case

Output characters in upper case. The results will be affected by the keyboard settings. Thus, please lock the keyboard before testing the scanner.



%0331

Enable CapsLock Detection



%0X88

Disable CapsLock Detection



%0X80

3.5 Interscan Code Delay



Delay the characters output time.

<No Delay>



%0070

5 msec



%0071

10 msec



%0072

25 msec



%0073

50 msec



%0074

100 msec



%0075

200 msec



%0076

300 msec










%0077















4

Code Type



4.1 Code Selection

If “Enable” is selected for all the barcode types, then the scanner could read all types of barcode. If “Disable” is selected for a certain barcode type, then the scanner could not read the particular barcode. The symbol of “< >” means default settings.

Enable All Bar Codes	 %1A/+
<Enable UPC-A>	 %0A44
Disable UPC-A	 %0A40
<Enable UPC-E>	 %0B08
Disable UPC-E	 %0B00
<Enable EAN-13 / JAN-13>	 %0A22
Disable EAN-13 / JAN-13	 %0A20

<Enable EAN-8 / JAN-8>	 %0A11
Disable EAN-8 / JAN-8	 %0A10
<Enable CODE 39>	 %0E08
Disable CODE 39	 %0E00
<Enable CODE 128>	 %0F08
Disable CODE 128	 %0F00
<Enable CODABAR/NW7>	 %0J08
Disable CODABAR/NW7	 %0J00
<Enable Interleave 25>	 %0G08
Disable Interleave 25	 %0G00
Enable Industrial 25	 %0H08
<Disable Industrial 25>	 %0H00
Enable Matrix 25	 %0I08
<Disable Matrix 25>	 %0I00

Enable CODE 93	 %0KO8
<Disable CODE 93>	 %0KO0
Enable CODE 11	 %0LO8
<Disable CODE 11>	 %0LO0
Enable China Postage	 %0MO8
<Disable China Postage>	 %0MO0
Enable MSI/PLESSE	 %0NO8
<Disable MSI/PLESSE>	 %0NO0
Enable CODE 2 OF 6	 %0PO8
<Disable CODE 2 OF 6>	 %0PO0
Enable Telepen	 %0TO8
<Disable Telepen>	 %0TO0
LCD25	 %0QO8
<Disable LCD25>	 %0QO0

RSS-14	 %0UO8
<Disable RSS-14>	 %0UO0
RSS Limited	 %0VO8
<Disable RSS Limited>	 %0VO0
RSS Expanded	 %0WO8
<Disable RSS Expanded>	 %0WO0

4.2 Bar Code ID



With this function on, a leading character will be added to the output string while scanning code; user may refer to the following table to know what kind of barcode is being scanned.










Enable Bar Code ID	 %00H1
Disable Bar Code ID	 %00H0
Default	 %913+

Code Type	ID	Code Type	ID
UPC-A	A	UPC-E	B
EAN-8	C	EAN-13	D
Code 39	E	CODE 128	F
Interleave 25	G	Industrial 25	H
Matrix 25	I	Codabar/NW7	J
CODE 93	K	CODE 11	L
China Postage	M	MSI/PLESSEY	N
Telepen	T	Code 2 of 6	P
RSS-14	U	RSS Limited	V
RSS Expanded	W		

4.3 User Define Code ID
















User define code ID will override default value. It is possible to have more than two symbologies which have same code ID

Step1	Scan the Bar Code You wish to define
Step2	Go to ASCII Table Appendix B, scan Bar Code(s) that represents the desired code ID
UPC-A	 %91A+
UPC-E	 %91B+
EAN-13/JAN-13	 %91Y+
EAN-8/JAN-8	 %91Z+
CODE 39	 %91E+
CODE 128	 %91F+
CODABAR/NW7	 %91J+
Interleave 25	 %91G+
Industrial 25	 %91H+
Matrix 25	 %91I+

CODE 93	 %91K+
CODE 11	 %91L+
China Postage	 %91M+
MSI/PLESSEY	 %91N+
Code 2 of 6	 %91P+
Telepen	 %91T+
LCD25	 %91Q+
Reserved 5	 %91R+
Reserved 6	 %91S+
RSS-14	 %91U+
RSS Limited	 %91V+
RSS Expanded	 %91W+





4.4 UPC/EAN/JAN

> Reading Type

Enable UPC-A= EAN 13 add 0 before UPC-A to make it 13 digits.	 %0AK4
<Disable UPC-A = EAN 13>	 %0AK0
Enable ISBN-10 =Disable ISBN-13	 %0B88
<Disable ISBN-10> =Enable ISBN-13	 %0B80
 If you need to use ISBN-13, Please turn on EAN 13 Check Digit Transmission Function as well.	
Enable ISSN	 %0B44
<Disable ISSN>	 %0B40
Decode with Supplement	 %0100
<Auto discriminate supplement>	 %0108
Enable Expand UPC-E	 %0BH1
<Disable Expand UPC-E>	 %0BH0
Enable EAN-8→EAN-13	 %0A08
<Disable EAN-8→EAN-13>	 %0A00





Enable GTIN format	 %OX44
<Disable GTIN format>	 %OX40







> Supplemental Setup

<No Supplement Required>	 %0B33
Enable 2 Digit Supplemental	 %0B31
Enable 5 Digit Supplemental	 %0B32
Enable 2 & 5 Digit Supplemental	 %0B30

> Check Digit Transmission

If “Check Digit” is selected, the scanner will transmit the check digit. If “Disable” is selected, the scanner will not transmit the check digit.

<UPC-A Check Digit Transmission>	 %0AI2
Disable UPC-A Check Digit Transmission	 %0AI0
<UPC-E Check Digit Transmission>	 %0BI2
Disable UPC-E Check Digit Transmission	 %0BI0


< EAN-8 Check Digit Transmission>	 %0A88
Disable EAN-8 Check Digit Transmission	 %0A80
< EAN-13 Check Digit Transmission>	 %0AH1
Disable EAN-13 Check Digit Transmission	 %0AH0
< ISSN Check Digit Transmission>	 %0BK4
Disable ISSN Check Digit Transmission	 %0BK0

4.5 Code 39

> Reading Type

< Standard Code 39>	 %0EH1
Full ASCII Code 39	 %0EH0
Enable Italian Pharmacy/Code 32	 %0E88
<Disable Italian Pharmacy/Code 32>	 %0E80

> Check Digit Transmission



<Do Not Calculate Check Digit>	 %0EM2
---	--

Calculate Check Digit and Transmit	 %0EM6
Calculate Check Digit and Not Transmit	 %0EM4

> Output Start / Stop Character



<start/stop character = “*”>

Enable Start/Stop Character	 %0E44
<Disable Start/Stop Character>	 %0E40


> Decode Asterisk

Enable Decode Asterisk The scanner will decode the “*” symbol in code 39.	 %0E22
<Disable Decode Asterisk> The scanner will not decode the “*” symbol in code 39.	 %0E20

> Setup Code Length



1. Scan the “Set Begin” Bar Code (2 Sets Available)
 2. Go to Decimal Value Table in Appendix A, scan Bar Code(s) that represents the code length
 3. Scan the “Complete” Bar Code
- Repeat Steps 1-3 to set additional lengths

< Variable> The output would be the	 %4E1+
---	--

same as the barcode's length.

There is no limit in length for the reading output.

Fix Length (2 sets Available)

1 **1st Set Begin**



%4E00

2 **Decimal Value**

Appendix A

3 **1st Set Complete**



%4E01

1 **2nd Set Begin**



%4E00

2 **Decimal Value**

Appendix A

3 **2nd Set Complete**



%4E02

Minimum Length

1 **Minimum Length**



%2+/-

Set a minimum length for codes. If the length of a code is shorter than the minimum length, then the scanner will not output the data.

2 **Decimal Value**

Appendix A

3 **Minimum Length Complete**



%2C0+



4.6 Code 128

> Check Digit Transmission

Do Not Calculate Check Digit	
Digit	%0FN1
Calculate Check Digit and Transmit	
<Calculate Check Digit and Not Transmit>	

> Append FNC2


“FNC2” is a multi codes-connection function for Code 128. Sometimes a Code 128 is divided into two barcodes for large amount of data.

Enable FNC2	
“ON” means after reading a code 128 barcode with FNC2, you must read the next Code 128 barcode with FNC2 in order to have a complete code output.	%0F88
<Disable FNC2>	
means reading only one Code 128 barcode.	%0F80

> Setup Code Length




1. Scan the “Set Begin” Bar Code (2 Sets Available)
 2. Go to Decimal Value Table in Appendix A, scan Bar Code(s) that represents the code length
 3. Scan the Complete Bar Code
- Repeat Steps 1-3 to set additional lengths


	< Variable>	
	The output would be the same as the barcode's length.	%4F1+
	There is no limit in length for the reading output.	

Fix Length (2 sets Available)

1	1st Set Begin	
		%4F00
2	Decimal Value	Appendix A
3	1st Set Complete	
		%4F01
1	2nd Set Begin	
		%4F00
2	Decimal Value	Appendix A
3	2nd Set Complete	
		%4F02

Minimum Length

1	Minimum Length	
	Set a minimum length for codes. If the length of a code is shorter than the minimum length, then the scanner will not output the data.	%2+-/
2	Decimal Value	Appendix A



3	Minimum Length Complete	 %2C1+
---	----------------------------	--

4.7 Interleave 25

> Check Digit Transmission

<Do not Calculate Check Digit>	 %0GN3
Calculate Check Digit and Transmit	 %0GN7
Calculate Check Digit and Not Transmit	 %0GN5


> Setup Number of Character


<Set up Digit Number as Even>	 %0G88
"Even" means the Interleave 25 code will be output in even numbers.	
Set up Digit Number as Odd	 %0G80
"Odd" means odd numbers.	


> **Brazilian Banking Code**

Enable Brazilian Banking Code	 %0G44
<Disable Brazilian Banking Code>	 %0G40

> **Setup Code Length**

	<ol style="list-style-type: none">1. Scan the “Set Begin” Bar Code (2 Sets Available)2. Go to Decimal Value Table in Appendix A, scan Bar Code(s) that represents the code length3. Scan the “Complete” Bar Code <p>Repeat Steps 1-3 to set additional lengths</p>
--	--

< Variable >	 %4G1+
The output would be the same as the barcode’s length. There is no limit in length for the reading output.	

Fix Length (2 sets Available)		
1	1st Set Begin	 %4G00
2	Decimal Value	Appendix A
3	1st Set Complete	 %4G01
1	2nd Set Begin	 %4G00
2	Decimal Value	Appendix A
3	2nd Set Complete	 %4G02

Minimum Length

1 Minimum Length

Set a minimum length for codes. If the length of a code is shorter than the minimum length, then the scanner will not output the data.



%2+-/

2 Appendix A

3 Minimum Length

Complete



%2C2+

4.8 Industrial 25

> Check Digit Transmission

<Do not Calculate Check
Digit>



%0HN3

Calculate Check Digit and
Transmit



%0HN7

Calculate Check Digit and
Not Transmit



%0HN5

> Setup Code Length



1. Scan the "Set Begin" Bar Code (2 Sets Available)
 2. Go to Decimal Value Table in Appendix A, scan Bar Code(s) that represents the code length
 3. Scan the Complete Bar Code
- Repeat Steps 1-3 to set additional lengths

< Variable>

The output would be the same as the barcode's length.





%4H1+

There is no limit in length for the reading output.

Fix Length (2 Sets Available)

1	1st Set Begin	 %4H00
2	Decimal Value	Appendix A
3	1 st Set Complete	 %4H01
1	2 nd Set Begin	 %4H00
2	Decimal Value	Appendix A
3	2 nd Set Complete	 %4H02

Minimum Length

1	Minimum Length Set a minimum length for codes. If the length of a code is shorter than the minimum length, then the scanner will not output the data.	 %2+/-
2	Decimal Value	Appendix A
3	Minimum Length Complete	 %2C3+

> IATA 25



Enable IATA 25	 %OH44
<Disable IATA 25>	 %OH40

4.9 Matrix 25

> Check Digit Transmission



<Do not Calculate Check Digit>	 %0IN3
Calculate Check Digit and Transmit	 %0IN7
Calculate Check Digit and Not Transmit	 %0IN5

> Setup Code Length

	<ol style="list-style-type: none">1. Scan the “Set Begin” Bar Code (2 Sets Available)2. Go to Decimal Value Table in Appendix A, scan Bar Code(s) that represents the code length3. Scan the “Complete” Bar Code Repeat Steps 1-3 to set additional lengths
< Variable>	 %4I1+
The output would be the same as the barcode’s length. There is no limit in length for the reading output.	
Fix Length (2 Sets Available)	


1	1st Set Begin	 %4I00
2	Decimal Value	Appendix A
3	1 st Set Complete	 %4I01
1	2 nd Set Begin	 %4I00
2	Decimal Value	Appendix A
3	2 nd Set Complete	 %4I02


Minimum Length

1	Minimum Length Set a minimum length for codes. If the length of a code is shorter than the minimum length, then the scanner will not output the data.	 %2+-/
2	Decimal Value	Appendix A
3	Minimum Length Complete	 %2C4+

4.10 CODABAR/NW7

> Start/Stop

Enable Start/Stop characters	 %0JH1
-------------------------------------	--

<Disable Start/Stop characters>	 %0JH0
--	--

> Transmission Type of Start/Stop

<A/B/C/D><Start>	 %04VF
<A/B/C/D><Stop>	 %04FF
A Start	 %04V1
A Stop	 %04F1
B Start	 %04V2
B Stop	 %04F2
C Start	 %04V4
C Stop	 %04F4
D Start	 %04V8
D Stop	 %04F8

> **Setup Code Length**



1. Scan the “Set Begin” Bar Code (2 Sets Available)
 2. Go to Decimal Value Table in Appendix A, scan Bar Code(s) that represents the code length
 3. Scan the “Complete” Bar Code
- Repeat Steps 1-3 to set additional lengths

< Variable>

The output would be the same as the barcode’s length.
There is no limit in length for the reading output.



%4J1+

Fix Length (2 Sets Available)

1 1st Set Begin



%4J00

2 Decimal Value

Appendix A

3 1st Set Complete



%4J01

1 2nd Set Begin



%4J00

2 Decimal Value

Appendix A

3 2nd Set Complete



%4J02


Minimum Length

1 Minimum Length

Set a minimum length for codes. If the length of a code is shorter than the minimum length, then



%2+/-



	the scanner will not output the data.	
2	Decimal Value	Appendix A
3	Minimum Length Complete	 %2C5+

4.11 Code 93

> Check Digit Transmission

< Calculate Check 2 Digit & not Transmit>	 %0KN4
Do not Calculate Check Digit	 %0KN3

> Setup Code Length



	1. Scan the “Set Begin” Bar Code (2 Sets Available) 2. Go to Decimal Value Table in Appendix A, scan Bar Code(s) that represents the code length 3. Scan the “Complete” Bar Code Repeat Steps 1-3 to set additional lengths
< Variable> The output would be the same as the barcode’s length. There is no limit in length for the reading output.	 %4K1+

Fix Length (2 Sets Available)

1	1st Set Begin	 %4K00
2	Decimal Value	Appendix A

3	1 st Set Complete	 %4K01
1	2 nd Set Begin	 %4K00
2	Decimal Value	Appendix A
3	2 nd Set Complete	 %4K02

Minimum Length

1	Minimum Length Set a minimum length for codes. If the length of a code is shorter than the minimum length, then the scanner will not output the data.	 %2+/-
2	Decimal Value	Appendix A
3	Minimum Length Complete	 %2C6+

4.12 Code 11

> Check Digit Transmission

<Do not Calculate Check Digit>	 %0LN3
Calculate Check 1 Digit and Transmit	 %0LN7
Calculate Check 1 Digit and Not Transmit	 %0LN5

Calculate Check 2 Digit and Transmit	 %0LN6
Calculate Check 2 Digit and Not Transmit	 %0LN4

> Setup Code Length



1. Scan the “Set Begin” Bar Code (2 Sets Available)
 2. Go to Decimal Value Table in Appendix A, scan Bar Code(s) that represents the code length
 3. Scan the “Complete” Bar Code
- Repeat Steps 1-3 to set additional lengths

< Variable>

The output would be the same as the barcode’s length. There is no limit in length for the reading output.



Fix Length (2 Sets Available)

1	1st Set Begin	 %4L00
2	Decimal Value	Appendix A
3	1 st Set Complete	 %4L01
1	2 nd Set Begin	 %4L00
2	Decimal Value	Appendix A
3	2 nd Set Complete	 %4L02

Minimum Length

1 Minimum Length

Set a minimum length for codes. If the length of a code is shorter than the minimum length, then the scanner will not output the data.



2 Decimal Value

Appendix A

3 Minimum Length Complete



4.13 MSI/PLESSEY Code

> Check Digit Transmission

<Do not Calculate Check Digit>



Calculate Check Digit and Transmit




Calculate Check Digit and Not Transmit



> Setup Code Length





1. Scan the "Set Begin" Bar Code (2 Sets Available)
 2. Go to Decimal Value Table in Appendix A, scan Bar Code(s) that represents the code length
 3. Scan the "Complete" Bar Code
- Repeat Steps 1-3 to set additional lengths
-

< Variable>		
The output would be the same as the barcode's length.		%4N1+
There is no limit in length for the reading output.		

Fix Length (2 Sets Available)

1	1st Set Begin	
		%4N00
2	Decimal Value	Appendix A
3	1st Set Complete	
		%4N01
1	2nd Set Begin	
		%4N00
2	Decimal Value	Appendix A
3	2nd Set Complete	
		%4N02

Minimum Length

1	Minimum Length Set a minimum length for codes. If the length of a code is shorter than the minimum length, then the scanner will not output the data.	
		%2+/-
2	Decimal Value	Appendix A
3	Minimum Length Complete	
		%2C9+

4.14 Code 2 of 6


> Check Digit Transmission

Do not Calculate Check Digit	
Digit	%0PN3
<Calculate Check Digit and Transmit>	
	%0PN7
Calculate Check Digit and Not Transmit	
	%0PN5



> Setup Code Length




1. Scan the “Set Begin” Bar Code (2 Sets Available)
 2. Go to Decimal Value Table in Appendix A, scan Bar Code(s) that represents the code length
 3. Scan the “Complete” Bar Code
- Repeat Steps 1-3 to set additional lengths


< Variable>	
The output would be the same as the barcode’s length. There is no limit in length for the reading output.	%4P1+


Fix Length (2 Sets Available)

1	1st Set Begin	
		%4P00
2	Decimal Value	Appendix A
3	1 st Set Complete	
		%4P01
1	2 nd Set Begin	
		%4P00
2	Decimal Value	Appendix A

3	2 nd Set Complete	 %4P02
---	------------------------------	--

Minimum Length

1	Minimum Length Set a minimum length for codes. If the length of a code is shorter than the minimum length, then the scanner will not output the data.	 %2+/-
---	---	--

2	Decimal Value	Appendix A
3	Minimum Length Complete	 %2CB+

4.15 Telepen

> Type of Code

<Telepen ASCII>	 %0T80
Telepen Numeric	 %0T88

> Check Digit Transmission

Do not Calculate Check Digit	 %0TN3
Calculate Check Digit and Transmit	 %0TN7
<Calculate Check Digit and Not Transmit>	 %0TN5

> Setup Code Length



1. Scan the “Set Begin” Bar Code (2 Sets Available)
 2. Go to Decimal Value Table in Appendix A, scan Bar Code(s) that represents the code length
 3. Scan the “Complete” Bar Code
- Repeat Steps 1-3 to set additional lengths

< Variable>

The output would be the same as the barcode’s length.
There is no limit in length for the reading output.



%4T1+

Fix Length (2 Sets Available)

1 1st Set Begin



%4T00

2 Decimal Value

Appendix A

3 1st Set Complete



%4T01

1 2nd Set Begin



%4T00

2 Decimal Value

Appendix A

3 2nd Set Complete



%4T02

Minimum Length

1 Minimum Length

Set a minimum length for codes. If the length of a code is shorter than the minimum length, then



%2+/-

the scanner will not
output the data.

2	Decimal Value	Appendix A
---	---------------	------------

3	Minimum Length Complete
---	----------------------------



%2CF+

3	Minimum Length Complete
---	----------------------------



%2C4+

4.16 LCD 25

> Check Digit Transmission

Do not Calculate Check Digit



%0QN3

Calculate Check Digit and Transmit



%0QN7

<Calculate Check Digit and Not Transmit>



%0QN5

> Setup Code Length



1. Scan the "Set Begin" Bar Code (2 Sets Available)
 2. Go to Decimal Value Table in Appendix A, scan Bar Code(s) that represents the code length
 3. Scan the "Complete" Bar Code
- Repeat Steps 1-3 to set additional lengths
-




< Variable>

The output would be the
same as the barcode's
length. There is no limit in
length for the reading
output.





%4Q1+

Fix Length (2 Sets Available)

1	1st Set Begin	 <i>%4Q00</i>
2	Decimal Value	Appendix A
3	1 st Set Complete	 <i>%4Q01</i>
1	2 nd Set Begin	 <i>%4Q00</i>
2	Decimal Value	Appendix A
3	2 nd Set Complete	 <i>%4Q02</i>






Minimum Length

1	Minimum Length Set a minimum length for codes. If the length of a code is shorter than the minimum length, then the scanner will not output the data.	 <i>%2+-/</i>
2	Decimal Value	Appendix A
3	Minimum Length Complete	 <i>%2CC+</i>

4.17 RSS-14


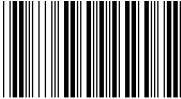

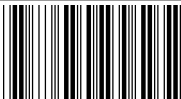

> Check Digit Transmission

RSS-14 Check Digit	
Transmit	<i>%0UN7</i>

RSS-14 Don't Transmit	
Check Digit	<i>%0UN5</i>
Transmit RSS-14	
Application ID	<i>%0U88</i>
Don't Transmit RSS-14	
Application ID	<i>%0U80</i>
Transmit RSS-14	
Symbology ID	<i>%0U44</i>
Don't Transmit RSS-14	
Symbology ID	<i>%0U40</i>

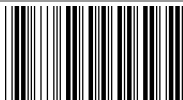
4.18 RSS Limited

> Check Digit Transmission

RSS Limited Check Digit	
Transmit	<i>%0VN7</i>
RSS Limited Don't Transmit	
Check Digit	<i>%0VN5</i>
Transmit RSS Limited	
Application ID	<i>%0V88</i>
Don't Transmit RSS Limited	
Application ID	<i>%0V80</i>
Transmit RSS Limited	
Symbology ID	<i>%0V44</i>

Don't Transmit RSS Limited

Symbology ID



%0V40

4.19 RSS Expanded

> Check Digit Transmission

Transmit RSS Expanded

Symbology ID



%OW44

Don't Transmit RSS

Expanded Symbology ID



%OW40

PREFIX/SUFFIX



5.1 Standard Suffixes

None

Data are displayed
continuously



%7S7+

<CR+LF>

The cursor moves to the left once data are displayed, and it will move to the next line when the next data is ready to be displayed. (This function is related to the software of the host, and the results will be affected by the software)



%7S2+

Enable CR Suffix – The scanner transmits a carriage return after each scan. The cursor moves to the left once data are displayed.



%7S0+

Enable LF Suffix – The scanner transmits a line feed after each scan. The cursor moves to the next line once data are displayed.



%7S1+

Enable Space

Once data are displayed, the cursor will skip a space to get ready for the next data.



Enable Tab(HT)

Once data are displayed, the cursor will skip a tab to get ready for the next data.



Enable STX-ETX

Before displaying a data, this function will add a STX ASCII code in front of the data, and an ETX ASCII code at the end of the data. This function is only limited to RS232 interface.



5.2 Insertion Data



You can insert character for up to 6 different barcode types.

-
- | | |
|-------|--|
| Steps | <ol style="list-style-type: none">1. Scan the bar code for the desired Set2. Scan the bar code of the desire bar code type3. Scan Bar Code(s) that represents the position of digit number to be inserted.(99 = Last digit)4. Scan the Compete of "Character Position to be inserted"5. Go to Appendix B or Appendix C, scan Bar Code(s) that represents the desired characters to be inserted6. Scan the "Complete" Bar Code |
|-------|--|
-

7. Scan "End"
8. Scan "Save"

Repeat Steps 1-6 to set additional set

> Example Insert \$ as Prefixes for Code UPC-A

Start



%\$/3

Set #1



Scan the bar code for the
desired Set

%500+

Code UPC-A



Scan the bar code of the
desired bar code type

%51A+

1st digit



1

Scan Bar Code(s) that
represents the position of digit
number to be inserted. (99 =
Last digit)

Complete



%520+

\$

scan Bar Code(s) that
represents the desired
characters to be inserted



24

Complete




%530+

Scan "End" bar code



%\$/4












Scan “Save” bar code	 %\$+/0
----------------------	---





> Insertion Set Number

Set #1	 %500+
Set #2	 %501+
Set #3	 %502+
Set #4	 %503+
Set #5	 %504+
Set #6	 %505+

> Code Type to be inserted

UPC-A	 %51A+
UPC-E	 %51B+
EAN-13/JAN-13	 %51Y+
EAN-8/JAN-8	 %51Z+
CODE 39	 %51E+

CODE 128	 %51F+
CODABAR/NW7	 %51J+
Interleave 25	 %51G+
Industrial 25	 %51H+
Matrix 25	 %51I+
CODE 93	 %51K+
CODE 11	 %51L+
China Postage	 %51M+
MSI/PLESSEY	 %51N+
Code 2 of 6	 %51P+
Telepen	 %51T+
Resvered 5	 %51R+
LCD25	 %51Q+
RSS-14	 %51U+

RSS Limited	 <i>%51V+</i>
RSS Expanded	 <i>%51W+</i>
All Codes	 <i>%51S+</i>
None	 <i>%514+</i>

> Character Position to be inserted



0



1



2



3



4



5



6



7



8



9

Complete%520+

> Character to be inserted

Go to Appendix B (ASCII), Appendix C (Function Key)

Complete%530+

End%\$/+4

Save%\$/+0





5.3 Deletion Data



You can delete character for up to 6 different barcode types.

Steps	<div>1. Scan the bar code for the desired set.</div> <div>2. Scan the desire bar code type</div> <div>3. Scan Bar Code(s) that represents the digit number of start position to be deleted</div> <div>4. Scan the “Compete” Bar Code of Character Position to be deleted</div> <div>5. Scan the numbers of characters need to be deleted.</div> <div>6. Scan the “Compete” Bar Code of Number of Characters to be deleted.</div> <div>7. Scan “End”.</div> <div>8. Scan “Save”.</div> <div>Repeat Steps 1-6 to set additional set</div>
-------	---

> **Example** Delete first 3 Digits for Code EAN-13

Start	<div></div> <div>%\$+/3</div>
Set #1	<div></div>
Scan the bar code for the desired set	<div>%800+</div>
Code EAN-13	<div></div>
Scan the desire bar code type	<div>%81Y+</div>
1st digit	<div></div>
Scan start position to be deleted	<div>1</div>










Complete	 %820+
3 Scan the numbers of characters need to be deleted	 3
Complete	 %830+
End	 %\$/+4
Save	 %\$/+0

> Delection Set Number

Set #1	 %800+
Set #2	 %801+
Set #3	 %802+
Set #4	 %803+
Set #5	 %804+
Set #6	 %805+

> Code Type to be deleted

UPC-A	 %81A+
UPC-E	 %81B+
EAN-13/JAN-13	 %81Y+
EAN-8/JAN-8	 %81Z+
CODE 39	 %81E+
CODE 128	 %81F+
CODABAR/NW7	 %81J+
Interleave 25	 %81G+
Industrial 25	 %81H+
Matrix 25	 %81I+
CODE 93	 %81K+
CODE 11	 %81L+
China Postage	 %81M+
MSI/PLESSEY	 %81N+

Code 2 of 6	 %81P+
Telepen	 %81T+
Resvered5	 %81R+
LCD25	 %81Q+
RSS-14	 %81U+
RSS Limited	 %81V+
RSS Expanded	 %81W+
All Codes	 %81S+
None	 %814+

> Delete Start Position



0



1



2



3



4



5



6



7



8



9

Complete



%820+

> Number of Characters to be deleted



0



1



2



3



4



5



6



7



8



9

Complete

%830+

End

%\$/4

Save

%\$/0

Appendix



A-Decimal Value



0



1



2



3



4



5



6



7






























8











9

B-ASCII Table















NULL	 00
ETX	 03
ACK	 06
HT	 09
FF	 0C
SI	 0F
DC2	 12
NAK	 15
CAN	 18
ESC	 1B
GS	 1D
RS	 1E
STX	 02















ENQ	 05
BS	 08
VT	 0B
SO	 0E
DC1	 11
DC4	 14
ETB	 17
SUB	 1A
SYN	 16
SOH	 01
EOT	 04
BEL	 07
LF	 0A
CR	 0D

DLE	 10
DC3	 13
%	 25
\$	 24
&	 26
( 28
,	 27
)	 29
+	 2B
*	 2A
, comma	 2C
. period	 2E
- minus	 2D
/	 2F






;	 3B
:	 3A
< Less than	 3C
> Greater than	 3E
=	 3D
?	 3F
@	 40
EM	 19
FS	 1C
US	 1F
SPACE	 20
"	 22
!	 21
#	 23



0 Number Zero	 30
1 Number One	 31
2	 32
3	 33
4	 34
5	 35
6	 36
7	 37
8	 38
9	 39
A	 41
B	 42
C	 43
D	 44

E	 45
F	 46
G	 47
H	 48
I Letter I	 49
J	 4A
K	 4B
L	 4C
M	 4D
N	 4E
O Letter O	 4F
P	 50
Q	 51
R	 52












S	 53
T	 54
U	 55
V	 56
W	 57
X	 58
Y	 59
Z	 5A
a	 61
b	 62
c	 63
d	 64
e	 65
f	 66








g	 67
h	 68
i	 69
j	 6A
k	 6B
l	 6C
m	 6D
n	 6E
o	 6F
p	 70
q	 71
r	 72
s	 73
t	 74

u	 75
v	 76
w	 77
x	 78
y	 79
z	 7A
~	 7E
}	 7D
DEL	 7F
{	 7B
[ 5B
\	 5C
– Underscore	 5F
]	 5D

^	 5E
,	 60

C-Function Key Table

F1	 C0
F2	 C1
F3	 C2
F4	 C3
F5	 C4
F6	 C5
F7	 C6
F8	 C7
F9	 C8
F10	 C9
F11	 CA

F12	 CB
Insert	 CC
Delete	 CD
Home	 CE
End	 D1
Page UP	 CF
Page Down	 D0
Left	 D2
Up	 D4
Right	 D3
Down	 D5

Save	 %\$/0
Recall	 %\$/1
Set all default	 %\$/2
Start	 %\$/3
End	 %\$/4
Abort	 %\$/6
Version Information	 %\$/5